# **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





NEWS LETTER

OF THE

BUREAU OF ENTOMOLOGY

U. S. DEPARTMENT OF AGRICULTURE.

NUMBER 7.

HAVELE STALL

The state of the s

The second secon

LOLOHOL H SEALANT I LI

THE PARTY OF

#### LIBRARY.

New Books.

The Department of Agriculture issued July 1, 1914 an 8-page pamphlet entitled "Preparation of articles for the Journal of Agricultural Research". This is being followed in the preparation of all contributions to the Journal of Agricultural Research and has been followed for all list of references in publications emanating from the Bureau of Entomology appearing in the Department Bulletin series and as Farmers' Bulletins since that time. If members of the Bureau would use this in preparing their manuscripts it would greatly facilitate the editorial work. Copies may be obtained from Mr. Karl F. Kellerman, Chairman, Editorial Committee, Journal of Agricultural Research, Bureau of Plant Industry, U. S. Department of Agriculture.

U. S. Superintendent of Documents. Price Lists.

No. 15 · U. S. Geological Survey publications.

No. 16 Farmers' Bulletins and Yearbooks.

No. 41 (ed. 5.) Insect pests and how to fight them. Sept. 1914.

No. 55 National Museum publications.

No. 56 Smithsonian Institution reports.

Program of work of the U.S. Department of Agriculture for the fiscal year 1915. 278 pp. Prepared July 1, 1914.

West Indies Imperial Department of Agriculture. Pamphlet series.

No. 72 Lime cultivation. 136 pp. Issued by the Commissioner of Agriculture, 1913. Chapter VII. Insect pests and fungus diseases, pp. 39-66. illus.

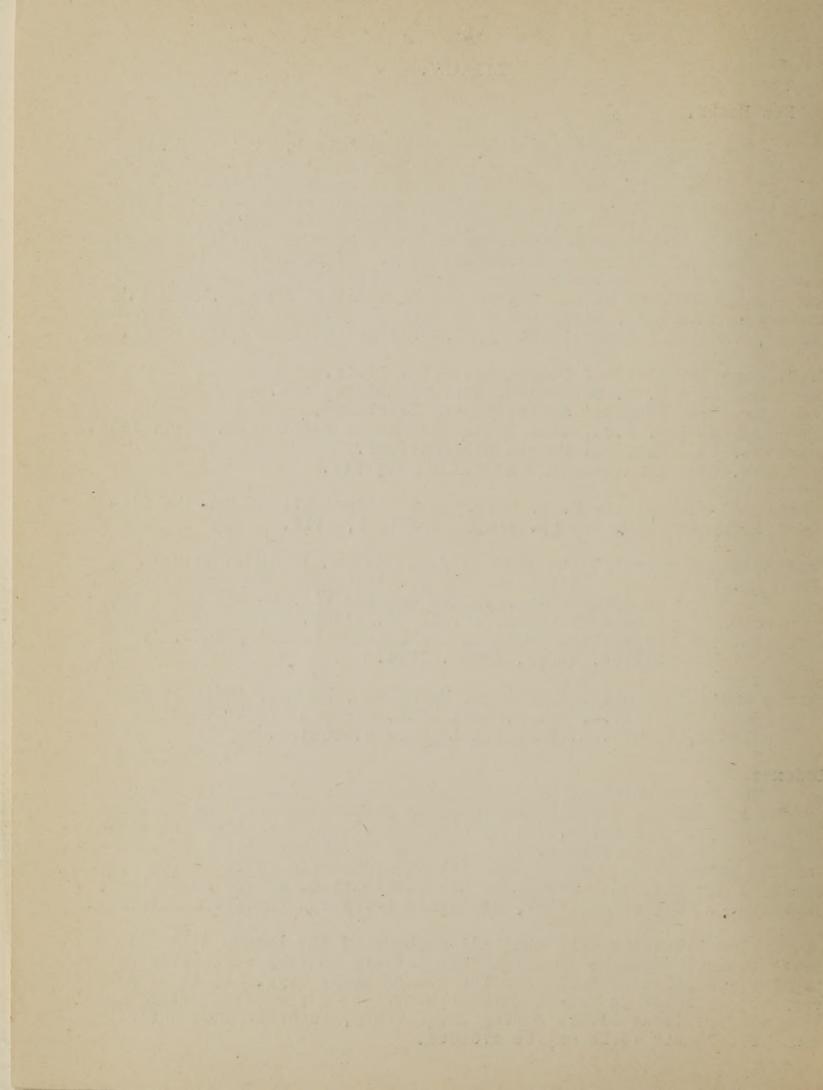
No. 75 Sugar-cane pests in the Leeward Islands, by H. A. Ballou. 45 pp. illus. 1914.

Kansas State Agricultural College, Manhattan, Kansas. Agricultural Education vol. 6, no. 2, Dec. 1913. Insects injurious to fruits, by Geo. A. Dean and Leonard M. Peairs.

#### Indexes.

The Bureau Library maintains a card index of articles one or more pages in length on insects mentioned in publications of the Bureau. This index is in 3 parts. (a) an alphabetic author list of the various publications of the Bureau. (b) a subject index alphabetic by the scientific names of the insects and (c) an alphabetic index of the common names of the insects. A list of the publications of the Bureau in series e.g. Bulletins 1-127, Circulars 1-173 etc is also maintained.

The librarian asks that all members of the bureau take care to leave books charged to them from the library in very accessible places if they are called out of town for two or three days. If it is necessary or desirable to take a book or number of a periodical with one on such a trip please always notify the library, in order that useless hunts for "lost" books may be avoided.



### BUREAU PUBLICATIONS.

An Index to cover Bureau Circulars, Nos. 101 to 173 inclusive, similar to that issued on November 2, 1911 (Circulars 1 to 100) is in the course of preparation and will be issued in the future.

### BEE CULTURE INVESTIGATIONS.

### E. F. Phillips, In Charge.

An inexpensive electric oven was recently purchased which is capable of maintaining any temperature desired from slightly above room temperature to above boiling point, with a constancy of about one degree Centigrade. This may be used as an incubator or paraffin

embedding oven.

The apparatus used in the investigation of bees in winter at the University of Pennsylvania, Philadelphia, during the past two winters has been moved and is now installed in the laboratory at Drummond, Md. A small room has been fitted up as a "bee cellar" in the basement in which the temperature changes will be slow, the room being completely surrounded by planer shavings one foot thick. The wiring for the temperature readings is now being installed, thermo-couples being used for this purpose. The special scales for taking hourly weighings of a colony of bees during winter have been installed in a room on the first floor of the laboratory and arranged to weigh a colony in the basement.

Dr. E. E. Phillips will leave about the middle of November to attend meetings of various State beekeepers' associations in Indianapolis,

Ind., Ames, Iowa, Springfield, Ill., and Madison, Wis.

Dr. Jas. A. Nelson has completed his work on the development of the honeybee in the egg on which investigation he has been engaged for some time. The paper will be published outside the Department.

The National Beekeepers' Association will meet in Denver, Colo.,

in February 1915.

The death of the celebrated Swiss beekeeper Dr. U. Kramer is announced.

Dr. Burton N. Gates, formerly of this bureau, is now Assistant Professor of Beekeeping at Amherst, Mass. He is president of the National Beekeepers' Association.

# DECIDUOUS FRUIT INSECT INVESTIGATIONS.

# A. L. Quaintance, In Charge.

Mr. E. J. Newcomer has arrived in Washington from the Wenatchee,

Wash., field station.

Mr. H. B. Scammell will spend the winter at his headquarters, Pemberton, N. J., where he will make observations in connection with investigations of cranberry insects, giving special attention to questions connected with flooding of cranberry bogs, hibernation of cranberry insects, etc.

The biological investigations in California of the grape Phylloxera have now been pretty well completed, and Mr. W. M. Davidson will

THE PARTY OF THE P College and the state of the st THE PART OF THE PART OF STREET OF ST and it grand the man and a second as the court of the court and the tristined or it remarks that to us one of the order of th The Spe late & last & Children and and

# DECIDUOUS FRUIT INSECT INVESTIGATIONS. (Continued)

spend the winter in Washington, and will be engaged in the preparation of his report and necessary illustrations. The field work with remedial measures against the Phylloxera will be continued under the direc-

tion of Mr. R. L. Nougaret.

The studies of the codling moth in Maine, carried out during the past two years under the direction of Messrs. E. H. Siegler and F. L. Simanton, have been completed and a report, giving the results of the work, will be prepared the present winter. It is planned to continue the laboratory in Maine, and to give special attention to investigations of the apple bud-moth and apple maggot.

Mr. R. A. Cushman, who is engaged in an investigation of Hymenopterous parasites of the grape berry moth and other deciduous fruit insects at North East, Pa., is just now on a trip of investigation through Onio, Indiana. Michigan, and will later visit the New England States to determine the distribution and seriousness of the apple seed Chalcis.

Mr. A. J. Ackerman has spent the late summer and fall at West Chester, Pa., in a careful study of the cause of stop-back of peach. His observations indicate that this is largely due to attack by the tarnished plant bug, and that the peach bud-mite (Tarsonemus waitei), is perhaps but little, if at all, concerned.

Mr. Quaintance has returned from his western trip, where he vis-

ited various field stations.

### PREVENTING SPREAD OF MOTHS.

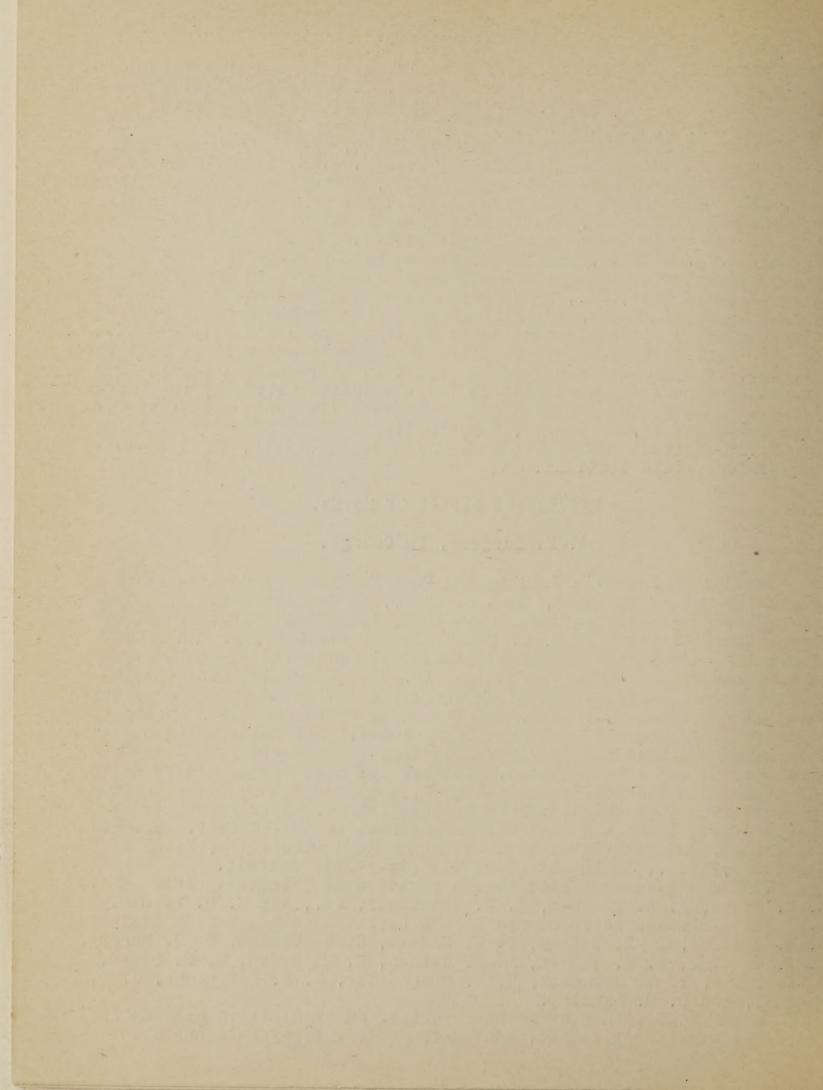
# A. F. Burgess, In Charge.

The Boston Domestic Science and Pure Food Exposition was being held at Mechanics Building, Boston, Mass., during the month of October. A large Government exhibit was installed, including exhibition of different activities of the U.S. Department of Agriculture. In connection with this exhibit a special display was prepared by the Gipsy Moth Branch of the Bureau of Entomology. This included maps showing the infested district which is under quarantine on account of the gipsy moth and the brown-tail moth, and the areas where parasites have been colonized and recovered are also illustrated. Several trays containing live parasites breeding on gipsy-moth eggs and a display of live Calosoma beetles are also included. Posters and post cards, illustrating the gipsy moth and the brown-tail moth, together with some of their imported natural enemies, are being distributed. A large number of visitors have shown a great deal of interest in the exhibit. Mr. R. Wooldridge, who is stationed at the Gipsy Moth Laboratory, Melrose Highlands, Mass., is in charge of the gipsy-moth exhibit.

Four men were appointed to the position of Scientific Assistant: D. W. Jones, H. A. Preston, J. V. Schaffner, Jr., and W. B. Turner.

Sixteen men were appointed to the position of Gipsy-Moth Assistant: W. A. Collins, I. L. Bailey, C. W. Minott, H. W. Vinton, D. G. Murphy, E. A. Proctor, A. M. Wilcox, L. E. Gibson, K. W. Brown, H. R. Gooch, A. W. Young, W. A. Shinkwin, H. I. Winchester, H. E. Partridge, C. B. Russell, and D. D. Landers.

These appointments were the result of an examination held on April 14 for Scientific Assistant, and on June 3 for Gipsy Moth Assistant.



## W. D. Hunter, In Charge.

D. L. Van Dine has returned to Washington from his field station at Mound, La. During the season he made a careful study of the relation of malaria to agriculture. In this work detailed information was obtained regarding the incidence of malaria and the time loss in each of seventy-four families. A study was also made of mosquito density in the various classes of habitations and the breeding places in the immediate vicinity of the houses were determined. An experiment was performed on a considerable scale in removing the cans, bottles and other receptacles in the vicinity of houses, and filling disused wells and old cisterns to determine the effect of such measures on mosquito density.

H. A. Morgan, dean of agriculture in the University of Tennessee, made a trip to Louisiana during the month at the request of the bureau. He visited the laboratories of Mound, Tallulah, and New Orleans. W. D. Hunter accompanied Professor Morgan on this trip, and also visited the

laboratories at Dallas and Victoria, Tex.

During the month a report on the occurence of the pink boll worm of cotton at Madison, Fla., was received. Immediate steps were taken by several offices in the department to eradicate the pest, but it was found on investigation by W. D. Pierce that the insect was Batrachedra rileyi which occured in unusual numbers in bolls affected by the anthracnose disease.

R. W. Moreland and G. A. Runner have been detailed to examine cotton fields in the vicinity of mills which have recently received foreign cottons to determine whether the pink boll worm has become established.

- H. C. Eagerton a colloborator of the bureau in South Carolina, has accepted a position as assistant Entomologist in the Cuban Experiment Station.
- W. D. Pierce investigated the dispersion of the boll weevil in the eastern part of the cotton belt early in the month, and later began working along the same line west of the Mississippi River. The work in the east is being conducted by F. L. McDonough.

G. N. Wolcott has returned to Porto Rico to take up the position

recently vacated by T. H. Jones.

T. E. Holloway has recently investigated the status of parasites of sugarcane insects at Brownsville, Tex. W. C. Loftin is engaged in the study of the extent of injury to sugar cane in the eastern states.

A. W. Jobbins-Pomeroy left for England on October 28. From London

he will proceed to his post in Southern Nigeria in a short time.

F. C. Bishopp made an extended trip to the Dakotas and other states in connection with reports of heavy loss arising from insects which attack horses and cattle.

The work on the control of the house fly which has been under way in Washington during the season will be conducted at New Orleans for several weeks. E. R. Barber will conduct the experiments at New Orleans. Mr. Hutchison will complete the work at Washington and inaugurate an extended series of experiments to determine certain points about the hibernations of the fly.

. D. L. Van Dine will present a paper on his work on malarial mosquitoes at the meeting of the Southern Medical Association at Richmond,

Va., on November 9.

al SED TO SELECTE IN SECTION OF A MARK WINDS

### of the Soments of dander

an id busses a led hi are sa i impenso hi enter o r . h i at anich e u sess.

with the Mark of the the that that the armine the track ton field in the lot the an moint and is and it ages it fore; A delided e amonad as and the term of and a sent aden of sent to H. A. starton a collaborator of he arego in South car ling, he

AFT HE PERSON ENGINEER AND DESCRIPTION OF THE PROPERTY OF THE market wings has a transcribed at a set of the add to use analyse the series to the day to state the state of the series and the . The All I Ev haten man bolled at tage a + NI

at and the commence of the commence of the same of the description of the second of the No. 10 th the second of t main will tight here was been of that if was t

elles about this, but it he Drives and is to a striped of the term to de separation suffer a reading the interior and suffering the sense and surgicial to photos an too covering to a weather the take of trace or of the state presents of applies AND THE STATE THE CAMPACT OF FREEDRICH LARRENCE IN MATERIAL HE TO FREEDRICH manufaction is with an

The which cit was no in an assess for the in it is said the make the make the THE AR ARE EARLY FOR BEACH FOR HAVE WELL AND A COMMENT OF THE WAS A WALLE OF 化环草酸酸酶 對原 的解剖并是被毒物 轉列不同日本 人名人 智水海豚 四旬四天 我一年前 的最后要人的 医表现最后的 医红斑红斑红斑 IT will address District his wart alle had the till burned and a confided all and Surface to the amount that it I be in an interior of the well for the ability of a page and

e the reach to the first of it at a to a common of the first addition of the garage of coth plat the two walls, was a wait and on district and the property of and Jad sos T a W who live is a be o

and all all of the state on leasther to cook of the ti tothiran es dias ne

as anthey o halle at and grad von the A. T bas bastanon . W . E on I have as vidade s 'an data willy to as armived, a spisse of sensitive and of the sour that all sale is to de sale is to t gas so A. C. Mererton a coll tora or d saf i to a collino a notrenes. D.A. recor manus end in respondentational least as of 1800 a sign of

and the state of the state and the state of the state of the consol but 10 '189 MT JER

I do on a vid nille yat besil and it don't see of anot an and the sast a sering con deser y i. he specially

the main and the property of the contract of the state of and as a vinta in and a but on agree its presented by. . . appeal owns thereof activities betain when or sound though it bear as definition in not TO THE PROPERTY OF THE PARTY OF

AND INSTRUCTION OF MAIN OF SELECT OF purphiest of accessossh accidat hashance est as molasse so: is the tar in TO TESTOOM OF THE